

What is claimed is:

1. A heart treatment equipment comprising:

a right ventricle pulse generator for supplying a heart stimulation pulse to a first heart stimulating electrode provided in a right ventricle of the heart;

a left ventricle pulse generator for supplying a heart stimulation pulse to a second heart stimulating electrode provided in a left ventricle of the heart; and

a controller for selecting one of or both of said right ventricle pulse generator and said left ventricle pulse generator,

wherein said controller selects both of said right ventricle pulse generator and said left ventricle pulse generator when a heart rate exceeds a predetermined value.

2. A heart treatment equipment according to claim 1 further comprising a nerve stimulator for supplying a nerve stimulation pulse to a nerve stimulation electrode which stimulates a vagus nerve, wherein said nerve stimulator generates a nerve stimulation pulse when a heart rate exceeds a predetermined value.

3. A heart treatment equipment comprising:

a right ventricle pulse generator for supplying a heart stimulation pulse to a first heart stimulating electrode provided in a right ventricle of the heart;

a left ventricle pulse generator for supplying a heart stimulation pulse to a second heart stimulating electrode provided in a left ventricle of the heart;

a nerve stimulator for supplying a nerve stimulating pulse for stimulating a vagus nerve to a nerve stimulating electrode; and

a controller for selecting one of or both of said right ventricle pulse generator and said left ventricle pulse generator,

wherein said controller selects both of said right ventricle pulse generator and said left ventricle pulse generator in response to a timing when said nerve stimulator generates a nerve stimulating pulse.

4. A heart treatment equipment according to claim 3, wherein the equipment further comprises an atrium event detector for detecting a spontaneous contraction of an atrium and atrioventricular delay time measuring portion responsive to said atrium event detector for measuring time after detecting the spontaneous contraction of the atrium.

5. A heart treatment equipment according to claim 4, wherein a ventricle stimulation is performed when one of said right ventricle pulse generator and said left ventricle pulse generator is selected and said atrioventricular delay time measuring portion is at a first atrioventricular delay time; and a ventricle stimulation is performed when both of said right ventricle pulse generator and said left ventricle pulse generator are selected and said atrioventricular

delay time measuring portion is at a second atrioventricular delay time.

6. A heart treatment equipment according to claim 5, wherein said second atrioventricular delay time is shorter than said first atrioventricular delay time.

7. A heart treatment equipment according to one of claim 3, wherein the selection of both of said right ventricle pulse generator and said left ventricle pulse generator is performed a predetermined number of times of the heart stimulations after the response of said nerve stimulator.

8. A heart treatment equipment according to claim 3, wherein the selection of both of said right ventricle pulse generator and said left ventricle pulse generator is performed for a predetermined time after the response of said nerve stimulator.

9. A heart treatment equipment according to claim 3, wherein the stimulations by said right ventricle pulse generator and said left ventricle pulse generator are performed at the same time for the ventricle stimulation where both of said right ventricle pulse generator and said left ventricle pulse generator are selected.

10. A heart treatment equipment according to claim 3, wherein said left ventricle pulse generator is operated for the ventricle

stimulation subsequently to the operation of said right ventricle pulse generator after a predetermined time where both of said right ventricle pulse generator and said left ventricle pulse generator are selected.

11. A heart treatment equipment according to claim 3, wherein said right ventricle pulse generator is operated for the ventricle stimulation subsequently to the operation of said left ventricle pulse generator after a predetermined time where both of said right ventricle pulse generator and said left ventricle pulse generator are selected.

12. A heart treatment equipment comprising:

a right ventricle pulse generator for supplying a heart stimulation pulse to a first heart stimulating electrode provided in a right ventricle of the heart;

a left ventricle pulse generator for supplying a heart stimulation pulse to a second heart stimulating electrode provided in a left ventricle of the heart;

an atrium event detector for detecting a contraction of an atrium;

an atrioventricular delay time measuring portion for measuring a delay time for triggering the ventricle stimulation after a predetermined atrioventricular delay time in response to said atrium event detector;

a heart rate monitor; and

a controller for selecting one of or both of said right ventricle pulse generator and said left ventricle pulse generator in response to said heart rate monitor.

13. A heart treatment equipment according to claim 12, wherein said controller selects both of said right ventricle pulse generator and said left ventricle pulse generator when said heart rate exceeds a predetermined threshold level.

14. A heart treatment equipment according to claim 12, wherein said heart rate is an atrium rate.

15. A heart treatment equipment according to claim 12, wherein said heart rate is a ventricle rate.

16. A heart treatment equipment comprising:

- a right ventricle pulse generator for supplying a heart stimulation pulse to a first heart stimulating electrode provided in a right ventricle of the heart;
- a left ventricle pulse generator for supplying a heart stimulation pulse to a second heart stimulating electrode provided in a left ventricle of the heart;
- an atrium event detector for detecting a contraction of an atrium;
- an atrioventricular delay time measuring portion for measuring a delay time for triggering the ventricle stimulation after a

predetermined atrioventricular delay time in response to said atrium event detector; and

a controller for selecting one of or both of said right ventricle pulse generator and said left ventricle pulse generator,

wherein said controller selects both of said right ventricle pulse generator and said left ventricle pulse generator when the interval of the triggers between the most recent ventricle stimulation and said ventricle stimulation is below a predetermined threshold value.